

2025 IEEE/ACM International Workshop on Methodological Issues with Empirical Studies in Software Engineering (WSESE 2025)

**Ottawa, Ontario, Canada
3 May 2025**



**IEEE Catalog Number: CFP25VP0-POD
ISBN: 979-8-3315-0226-3**

**Copyright © 2025 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP25VP0-POD
ISBN (Print-On-Demand):	979-8-3315-0226-3
ISBN (Online):	979-8-3315-0225-6

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

2025 IEEE/ACM International Workshop on Methodological Issues with Empirical Studies in Software Engineering (WSESE) **WSESE 2025**

Table of Contents

Message from the Workshop Chairs	vii
Committees	viii

WSESE 2025

Analyzing and interpreting software development cost estimation error	1
<i>Magne Joergensen (Simula Metropolitan)</i>	
A Framework for Using LLMs for Repository Mining Studies in Empirical Software Engineering.....	6
<i>Vincenzo De Martino (University of Salerno, Italy), Joel Castaño (Universitat Politècnica de Catalunya, Spain), Fabio Palomba (University of Salerno, Italy), Xavier Franch (Universitat Politècnica de Catalunya, Spain), and Silverio Martínez-Fernández (Universitat Politècnica de Catalunya, Spain)</i>	
Exploring How SE Academic Papers Use Figures	12
<i>Marco Torchiano (Politecnico di Torino, Italy) and Lorenzo Laudadio (Politecnico di Torino, Italy)</i>	
On the difficulties of conducting and replicating systematic literature reviews studies using LLMs in software engineering	20
<i>Katia Romero Felizardo (Universidade Tecnológica Federal do Paraná (UTFPR), Brazil), Anderson Deizepe (Universidade Tecnológica Federal do Paraná (UTFPR), Brazil), Daniel Coutinho (Pontifical Catholic University of Rio de Janeiro (PUC-RIO), Brazil), Genildo Gomes (Federal University of Amazonas (UFAM), Brazil), Maria Meireles (Federal University of Amazonas (UFAM), Brazil), Marco Gerosa (Northern Arizona University (NAU), USA), and Igor Steinmacher (Northern Arizona University (NAU), USA)</i>	
Towards Evaluation Guidelines for Empirical Studies involving LLMs	24
<i>Stefan Wagner (Technical University of Munich, Germany), Marvin Muñoz Barón (Technical University of Munich, Germany), Davide Falessi (University of Rome "Tor Vergata", Italy), and Sebastian Baltes (University of Bayreuth, Germany)</i>	

Integrating Positionality Statements in Empirical Software Engineering Research	28
<i>Breno Felix de Sousa (Federal University of Pernambuco), Ronnie de Souza Santos (University of Calgary), and Kiev Santos da Gama (Federal University of Pernambuco)</i>	
Applications and Implications of Large Language Models in Qualitative Analysis: A New Frontier for Empirical Software Engineering	36
<i>Matheus de Moraes Leça (University of Calgary, Canada), Lucas Valença (University of Calgary, Canada), Reynê Santos (Universidade Federal de Pernambuco, Brazil), and Ronnie de Souza Santos (University of Calgary, Canada)</i>	
On the Relevance of Paper-Type Information in Systematic Mapping Studies in Software Engineering	44
<i>Nauman bin Ali (Blekinge Institute of Technology) and Jürgen Börstler (Blekinge Institute of Technology)</i>	
Large Language Model for Qualitative Research - A Systematic Mapping Study	48
<i>Cauã Ferreira Barros (Federal University of Goiás, Brazil), Bruna Borges Azevedo (Federal University of Goiás, Brazil), Valdemar Vicente Graciano Neto (Federal University of Goiás, Brazil), Mohamad Kassab (Boston University, USA), Marcos Kalinowski (Pontifical Catholic University of Rio de Janeiro, Brazil), Hugo Alexandre Dantas do Nascimento (Federal University of Goiás, Brazil), and Michelle Carvalho Galvão da Silva Pinto Bandeira (Federal University of Goiás, Brazil)</i>	
Can Machine Learning Support the Selection of Studies for Systematic Literature Review Updates?	56
<i>Marcelo Costalonga (Pontifical Catholic University of Rio de Janeiro (PUC-Rio)), Bianca Minetto Napoleão (Université du Québec à Chicoutimi), Maria Teresa Baldassarre (University of Bari), Katia Romero Felizardo (Universidade Tecnológica Federal do Paraná), Igor Steinmacher (Northern Arizona University), and Marcos Kalinowski (Pontifical Catholic University of Rio de Janeiro (PUC-Rio))</i>	
Methodological and Practical Challenges in Longitudinal, Large-Scale, Collaborative Questionnaire Survey Research	64
<i>Miikka Kuutila (Dalhousie University) and Paul Ralph (Dalhousie University)</i>	
Author Index	71